

□if a English version is needed, please let me know□

□ □ □ □ □ □ □ □ □ □ □ □ □ □ □

☐☐ ☐☐☐ email: gulifan@hotmail.com

□□□□

[illegible][illegible]

Turing Test

[illegible][illegible][illegible]

Nature

□ □ □ □ □ □ □ □ □ □ □ □

[illegible][illegible][illegible][illegible][illegible][illegible]

--

--

[illegible][illegible][illegible][illegible]

□□□□□□□□

17x17

[illegible]

AlphaGo Zero

```

19x19 board game
board game
game
game
game

```

[illegible][illegible]

1) AlphaGo Zero superhuman

[illegible]

2) Chinese room argument

3) The Selfish Gene (The Immortal Gene)

Technological Singularity AlphaGo Zero superhuman Quantum Supremacy

[illegible][illegible]

20

[illegible]

1

200 10% 1% 2

[illegible]

BRAIN Initiative

□ □

AlphaGo Zero Superhuman Quantum Supremacy

Nature

AlphaGo Zero の Nature での superhuman 性能 [2] AlphaGo の 100 万回以上の self-play game AlphaGo Zero の 100 万回以上の self-play game

game Nature Quantum Supremacy [3]

Shor’s algorithm Quantum Supremacy

qubit NISQnoisy intermediate-scale quantum

Quantum Supremacy Sycamore NISQ noise noise noise

Sycamore AlphaGo Zero

Quantum Supremacy noise

Sycamore Sycamore 200 10000

Quantum Supremacy NISQ John Preskill [4]

Quantum Supremacy Quantum Supremacy Nature

Quantum Supremacy optimization machine learning NISQ noisy Sycamore

noisy

Quantum Supremacy

Nature Superhuman Quantum Supremacy

tensor

AlphaGo Zero Superhuman Quantum Supremacy

□ □ □ □ □ □ □ □ □ □ □ □

[illegible][illegible]

Académie française

[illegible][illegible][illegible][illegible][illegible][illegible][illegible]

1111

smart phone

niche market
IT

[illegible][illegible][illegible][illegible]

□□

~~~~~

[1] Dialogo sopra i due massimi sistemi del mondo (Dialogue Concerning the Two Chief World Systems), Galileo Galilei, published in 1632.

[2] Mastering the game of Go without human knowledge, Silver D., Schrittwieser J., Simonyan K. et al, published in Nature, on 18 October 2017:  
<https://www.nature.com/articles/nature24270>.

[3] Quantum supremacy using a programmable superconducting processor, Arute F. et al, published in Nature, on 23 October, 2019:  
<https://www.nature.com/articles/s41586-019-1666-5>

[4] <https://www.quantamagazine.org/john-preskill-explains-quantum-supremacy-20191002/>.